

## LOG OF MEETING

**SUBJECT:** Multi-Purpose Lighters -  
Meeting of Technical Task Group 2 of ASTM Sub-Committee F15.02,  
Safety Standards for Cigarette Lighters

**DATE OF MEETING:** November 2, 1998

**PERSON SUBMITTING LOG:** Barbara J. Jacobson

**LOCATION:** Marriott Suites Hotel  
Herndon, VA

**CPSC ATTENDEE(S):**

Barbara Jacobson, Directorate for Epidemiology and Health Sciences  
Harleigh Ewell, Office of the General Counsel  
Michael Bogumill, Office of Compliance  
Eleanor Perry and Caroleene Paul, Directorate for Engineering Sciences

**NON-CPSC ATTENDEE(S):** See listing of attendees in the attached ASTM F15.02  
Technical Task Group 2 minutes.

**SUMMARY OF MEETING:**

The purpose of the meeting was for members of the ASTM Technical Task Group to provide the CPSC project staff with their input on the provisions of the Commission's September 30, 1998, proposed rule to require multi-purpose lighters to be child-resistant.

See attached ASTM F15.02 Technical Task Group 2 minutes for details.

CPSA/6 (b)(1) Cleared  
No Mfrs/PrvtLbtrs or  
Products Identified  
Excepted by  
Firms Notified,  
Comments Processed.

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**SUB-COMMITTEE F15.02**

**MINUTES OF SECOND MEETING OF TTG2--UTILITY LIGHTERS**

**MEETING PLACE:** Dulles Airport--Marriott Suites Hotel

**DATE OF MEETING:** November 2, 1998

**November 4, 1998**

The purpose of this meeting of TTG2 was to discuss and then provide input to the CPSC on the Federal Register of Wednesday, September 30, 1998, Part V, 16 CFR Parts 1145 and 1212. This publication includes the proposed rule to regulate under the CPSA risks of injury associated with multi-purpose lighters that can be operated by children, the notice of proposed rulemaking and the proposed rules.

Most of the morning session was devoted to the definition of multi-purpose lighters. The main concern of TTG2 was that the definition in the Federal Register was too broad and overlapped with products primarily used to ignite cigars, cigarettes and pipes. This overlap was caused chiefly by the inclusion of microtorches in the proposed rule. The group agreed that if microtorches are included in the rule the best way to avoid future questions would be to define m-p lighters as consisting of 2 categories of products. One would be utility lighters, which are generally recognized as having an elongated nozzle and marketed to provide safer ignition for grills, pilot lights etc.. The other would be microtorches, which are marketed for hobby uses, including soldering, brazing and welding. In addition to defining m-p lighters as consisting of 2 categories it was felt that specific exclusions should be made for gas and liquid fuel luxury lighters sold primarily to ignite tobacco products.

Other suggestions and/or comments on the definition of m-p lighters included:

1. The term "self-igniting" implies a spontaneous combustion. It was suggested that words to the effect of "containing an ignition system" would be more appropriate.
2. The word "handheld" is not consistent with subsequent references to "hands-free" operation. Breaking up the definition into 2 categories would take care of this, since utility lighters do not provide for hands-free operation.
3. Excluding devices which contain more than 10 oz. of fuel creates a loophole which could allow some devices to avoid increasing child resistancy.

The requirement to allow multiple operations without further operation of the child resistant mechanism was deemed to be a design rather than a performance requirement. It was brought up there are other methods of solving the "flashback" problem, which is the reason the multiple operations requirement was added to the rule.

One such method is "ignition reliability". A test method for determining ignition reliability was proposed by Mike Forys and is included with these minutes (Appendix A).

It was agreed that if the test protocol was followed it would be possible for manufacturers to avoid the 85% CR criterion by making the "off/on" switch particularly difficult to operate. This could lead intended users to leave the switch in the unlocked position, thus allowing child access to products with CR mechanisms not meeting the 85% requirement. There was no objection in the group to testing products for child resistancy with the switch in the unlocked position.

There were strong objections to a statement found on Page 52409 (3rd column) regarding CR mechanisms being easily deactivated. This statement reads "The Commission interprets this as requiring the the child-resistant mechanism cannot easily be disabled with a common household tool, such as a knife or pliers, and still remain operable". The objections were a) this statement is not present in CFR, Part 1210 covering the child resistancy of cigarette lighters, b) there is no definition of a "common household tool and c) that it would be very difficult if not impossible to design a CR mechanism which would resist a determined persons resolve to deactivate the mechanism with a "common household tool". It was strongly recommended the statement be deleted from the proposed rule.

There were 2 other items brought up which were more or less editorial in nature:

1. On Page 52401 (2nd column) it is stated that matches and lighters are common substitutes for m-p lighters. It was felt that these products were not suitable substitutes for either category of m-p lighters because they cannot perform the functions those products are designed for.
2. On Page 52419, 1212.5 (c), the last sentence states "The standard's requirements should ensure that most children under 52 months of age cannot operate the lighters". It was agreed an appropriate replacement for this sentence would read "The standard's requirements should ensure that 85% of the children under 52 months of age cannot operate the lighters when tested in accordance with the test protocol".

It was requested by CPSC members present that the above suggestions and/or comments be transmitted to the CPSC in writing and in more detail as soon as possible.

Sincerely,



Edward M. Lewiecki, P.E.  
Chairman, ASTM Sub-Committee F15.02  
Safety Standards for Lighters

See Next Page for TTG2 Meeting Attendees:

TTG2 Meeting Attendees:

Ed Lewiecki, Chairman  
Roger Ducharme, Colibri  
Mike Forys, Scripto-Tokai  
Tom Kelleher, Bic  
Paul Adams, Bic  
Takao Fujimoto, JETRO New York  
Matt McLoughlin, Swedish Match NA  
David Baker, Lighter Association  
Thomas E. Morlock, Zippo Mfg. Co.  
Colleen Scherkenbach, Swedish Match

\*Barbara Jacobson, CPSC  
\*Harleigh Ewell, CPSC/ OGC  
\*Caroleene Paul, CPSC  
\*Eleanor Perry, CPSC  
\*Michael T. Bogumill, CPSC/CRC

\*Attended P.M. only

EML/vnl

MULTI-PURPOSE LIGHTER IGNITION RELIABILITY

1.1 *Purpose* - The purpose of this test is to determine multi-purpose lighter ignition reliability.

1.1.2 *Significance* - This test provides information on the degree to which a multi-purpose lighter actually produces a flame when the ignition mechanism is operated repeatedly. Ignition reliability, as tested herein, is a major factor in preventing backflash fires. Backflash accidents occur when excess flammable gas is allowed to build up prior to being ignited. This can occur when a multi-purpose lighter fails to light on the first, second, third or subsequent attempts.

1.2 *Apparatus* - An ignition testing machine or comparable device capable of securing a multi-purpose lighter in a vertical position and operating its ignition mechanism at specified speeds and intervals. A temperature and humidity controlled room or enclosure.

1.3 *Test Specimens* - The specimens shall consist of new, complete, normally-fueled multi-purpose lighters which initially are free of mechanical damage.

1.3.1 *Specimen 1* - The multi-purpose lighter shall be stabilized at  $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$  at a relative humidity of  $65 \pm 5\%$  for at least 10 hours, and, if it incorporates a flame adjustment feature, the flame shall be adjusted to a height of  $40 \pm 5\text{mm}$ , or at the maximum height the adjustment allows, if less than  $40 \pm 5\text{mm}$ .

1.3.2 *Specimen 2* - The multi-purpose lighter shall be stabilized at  $10^{\circ}\text{C} \pm 2^{\circ}\text{C}$  at a relative humidity of  $65 \pm 5\%$  for at least 10 hours, and, if it incorporates a flame adjustment feature, the flame shall be adjusted to a height of  $40 \pm 5\text{mm}$ , or at the maximum height the adjustment allows, if less than  $40 \pm 5\text{mm}$ .

1.4 *Procedure* -

1.4.1 For Specimen 1, maintain room/enclosure temperature of  $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$  at  $65 \pm 5\%$  relative humidity. For Specimen 2, maintain room/enclosure temperature of  $10^{\circ}\text{C} \pm 2^{\circ}\text{C}$  at  $65 \pm 5\%$  relative humidity.

1.4.2 Place the specimen in the ignition testing machine in the vertical position, so that the nozzle is pointing directly upward.

1.4.3 Set the ignition testing machine to ignite the specimen at a speed of 0.3 seconds with a burn time of 0.2-0.3 seconds, at 1 second intervals. Repeat for five ignitions.

1.4.4 Set the ignition testing machine to ignite the specimen at a speed of 0.1 seconds

with a burn time of 0.2-0.3 seconds, at 1 second intervals. Repeat for five ignitions.

1.4.5 Record the number of times specimen produces a flame during the ten ignition attempts.

1.4.6 Exercise special caution when removing the multi-purpose lighters from the ignition testing machine to avoid burn injury.

1.4.7 The number of samples of test specimens used will be governed by the size of the production lot as set forth in MIL-STD-105, Special Inspection Level S-4.

1.4.8 A test sample of Specimen 1 multi-purpose lighters which produces a flame in less than 70% of the ignition attempts, as recorded in 1.4.5 above, constitutes a failure.

1.4.9 A test sample of Specimen 2 multi-purpose lighters which produces a flame in less than 65% of the ignition attempts, as recorded in 1.4.5 above, constitutes a failure.

